ELSEVIER

Surface Science 437 (1999) 397–399

surface science

www.elsevier.nl/locate/susc

Author index

Abee, M.W., see York 437 (1999) 386
Adams, D.L., see Petersen 437 (1999) 317
Ainsworth, M.K., M.R.S. McCoustra, M.A. Chesters, N. Sheppard and C. De La Cruz, An infrared study of ethene and CO coadsorption on Pt[111] and a Pt/SiO_2 catalyst: ambiguities in the interpretation of difference spectra 437 (1999) 9
Alfè, D., S. de Gironcoli and S. Baroni, The reconstruction of nickel and rhodium (001) surfaces upon carbon, nitrogen or oxygen adsorptions 437 (1999) 18
Armstrong, N.R., see Schmitz-Hübsch 437 (1999) 163

Baberschke, K., see Poulopoulos 437 (1999) 277
Back, A., see Schmitz-Hübsch 437 (1999) 163
Baraldi, A., see Cowell 437 (1999) 1
Baroni, S., see Alfè 437 (1999) 18
Barucca, G., see Pinto 437 (1999) 145
Baudon, J., see Boustimi 437 (1999) 91
Biener, J., see Dinger 437 (1999) 116
Birch, J., see Sandström 437 (1999) L767
Bisani, M. and W. Selke, Step fluctuations and random walks 437 (1999) 137
Bogicevic, A. and D.R. Jennison, Role of surface vacancies and water products in metal nucleation: Pt/MgO(100) 437 (1999) L741
Bourgeois, S., see Mostéfa-Sba 437 (1999) 107
Boustimi, M., J. Baudon, A. Semlali, R. Mathevet and B. Labani, The problem of an atom inside a cavity in an infinite isotropic medium 437 (1999) 91
Briggs, G.A.D., see Tanner 437 (1999) 263
Bullett, D.W., see Pang 437 (1999) 261

Capozi, M., see Pedio 437 (1999) 249
Casalboni, M., see Pinto 437 (1999) 145
Castell, M.R., see Tanner 437 (1999) 263
Caudano, R., see Pedio 437 (1999) 249
Chen, G., see Freure 437 (1999) 231
Chesters, M.A., see Ainsworth 437 (1999) 9
Chulkov, E.V., V.M. Silkin and P.M. Echenique, Image potential states on metal surfaces: binding energies and wave functions 437 (1999) 330
Cowell, J.J., A.K. Santra, R. Lindsay, R.M. Lambert, A. Baraldi and A. Goldoni, Bonding and reactivity of styrene on Cu(110): heterogeneous alkene epoxidation without the use of silver 437 (1999) 1
Cox, D.F., see York 437 (1999) 386

De Crescenzi, M., see Pinto 437 (1999) 145
De Gironcoli, S., see Alfè 437 (1999) 18
De La Cruz, C., see Ainsworth 437 (1999) 9
Diebold, U., see Li 437 (1999) 173
Dinger, A., C. Lutterloh, J. Biener and J. Küppers, Reactions of hydrogen atoms with acetone monolayers adsorbed on graphite monolayer covered Pt(111) surfaces 437 (1999) 116
Dittrich, Th., M. Schwartzkopff, E. Hartmann and J. Rappich, On the origin of the positive charge on hydrogenated Si surfaces and its dependence on the surface morphology 437 (1999) 154
Domenichini, B., see Mostéfa-Sba 437 (1999) 107

Echenique, P.M., see Chulkov 437 (1999) 330
Ehrlich, G., see Kyuno 437 (1999) 29
Engkvist, O. and A.J. Stone, Adsorption of water on the MgO(001) surface 437 (1999) 239
Erlacher, K., R. Resel, S. Hampel, T. Kuhlmann, K. Lischka, B. Müller, A. Thierry, B. Lotz and G. Leising, Epitaxial growth of *para*-hexaphenyl on GaAs(001)-2 × 4 437 (1999) 191

Farle, M., see Poulopoulos 437 (1999) 277
Ferguson, B.A., C.T. Reeves and C.B. Mullins, Trapping dynamics of disilane on bare and monohydride-terminated Si(100)-2 × 1 437 (1999) L748
Finkelstein, Y., R. Moreh and O. Shahal, Out-of-plane orientation of multilayer N_2 films adsorbed on Grafoil at 20 K 437 (1999) 265
Flynn, C.P., see Święch 437 (1999) 61
Freure, C., G. Chen and J.H. Horton, Examination of solvent interactions at the surface of poly(ethylene)terepthalate films using atomic force microscopy and infrared spectroscopy 437 (1999) 231
Fritz, T., see Schmitz-Hübsch 437 (1999) 163

Go, E.P., K. Thuermer and J.E. Reutt-Robey, H adsorption and the formation of alane oligomers on Al(111) 437 (1999) 377
Goldoni, A., see Cowell 437 (1999) 1
Goldoni, A. and G. Paolucci, The interaction of C_{60} with Ag(100): strong predominantly ionic bonding 437 (1999) 353
Goodman, D.W., see Guo 437 (1999) 38
Goodman, D.W., see Guo 437 (1999) 49
Gouttebaron, R., see Pedio 437 (1999) 249
Gross, L., see Li 437 (1999) 173
Gülseren, O., see Pang 437 (1999) 261
Guo, Q., S. Lee and D.W. Goodman, Vanadium oxides thin films grown on rutile TiO_2(110)-(1 × 1) and (1 × 2) surfaces 437 (1999) 38
Guo, Q., W.S. Oh and D.W. Goodman, Titanium oxide films grown on Mo(110) 437 (1999) 49

Halicioglu, T. and D. Srivastava, Energetics for bonding and detachment steps in etching of Si by Cl 437 (1999) L773
Hampel, S., see Erlacher 437 (1999) 191
Hänggi, P., see Talkner 437 (1999) 198
Hartmann, E., see Dittrich 437 (1999) 154
Hattori, K., see Iimori 437 (1999) 86
Haycock, S.A., see Pang 437 (1999) 261
Hebenstreit, W., see Li 437 (1999) 173
Held, G., see Koschel 437 (1999) 125
Henderson, M.A., see Li 437 (1999) 173
Herman, G.S., Characterization of surface defects on epitaxial CeO_2(001) films 437 (1999) 207
Hershkovitz, E., see Talkner 437 (1999) 198
Hevesi, K., see Pedio 437 (1999) 249
Hishita, S., see Suzuki 437 (1999) 289
Hoffer, S., see Roberts 437 (1999) 75
Hoffman, S.V., see Petersen 437 (1999) 317
Horton, J.H., see Freure 437 (1999) 231
Hu, P., see Michaelides 437 (1999) 362
Hu, X., see Jia 437 (1999) 299

Iimori, T., K. Hattori, K. Shudo and F. Komori, Chlorine extraction by atomic hydrogen on Si(111)-7 × 7 surfaces 437 (1999) 86

James, R., see Pang 437 (1999) 261
Jennison, D.R., see Bogicevic 437 (1999) L741
Jennison, D.R., see Li 437 (1999) 173
Jia, Y., X. Hu, B. Ma, J. Wan and L. Ye, Surface electronic properties of Si(337) 437 (1999) 299

Kasemo, B., see Zhdanov 437 (1999) 307
Komori, F., see Iimori 437 (1999) 86
Koschel, H., G. Held, P. Trischberger, W. Widdra and H.-P. Steinrück, Benzene adsorption on a pseudomorphic Cu monolayer on Ni(111) – a combined TPD and ARUPS study 437 (1999) 125
Kuhlmann, T., see Erlacher 437 (1999) 191
Küppers, J., see Dinger 437 (1999) 116
Kyuno, K. and G. Ehrlich, Diffusion and dissociation of platinum clusters on Pt(111) 437 (1999) 29

Labani, B., see Boustimi 437 (1999) 91
Lambert, R.M., see Cowell 437 (1999) 1
Lantz, M.A., S.J. O'Shea and M.E. Welland, Measurement of forces during the modification of C60 islands 437 (1999) 99
Lee, S., see Guo 437 (1999) 38
Leising, G., see Erlacher 437 (1999) 191
Leo, K., see Schmitz-Hübsch 437 (1999) 163
Li, M., W. Hebenstreit, L. Gross, U. Diebold, M.A. Henderson, D.R. Jennison, P.A. Schultz and M.P. Sears, Oxygen-induced restructuring of the TiO_2(110) surface: a comprehensive study 437 (1999) 173
Lindner, J., see Poulopoulos 437 (1999) 277
Lindsay, R., see Cowell 437 (1999) 1
Lischka, K., see Erlacher 437 (1999) 191
Lotz, B., see Erlacher 437 (1999) 191
Lutterloh, C., see Dinger 437 (1999) 116

Ma, B., see Jia 437 (1999) 299
Majni, G., see Pinto 437 (1999) 145
Mathevet, R., see Boustimi 437 (1999) 91
McCoustra, M.R.S., see Ainsworth 437 (1999) 9
Michaelides, A. and P. Hu, Methyl chemisorption on Ni(111) and C–H–M multicentre bonding: a density functional theory study 437 (1999) 362
Mikkelsen, A., see Petersen 437 (1999) 317
Minoda, H. and K. Yagi, Surface morphology of Au-adsorbed Si(001) vicinal surfaces studied by reflection electron microscopy 437 (1999) L761
Miyamae, T., H. Uchida, I.H. Munro and T. Urisu, Direct observation of synchrotron-radiation-stimulated desorption of thin SiO_2 films on Si(111) by scanning tunneling microscopy 437 (1999) L755
Moreh, R., see Finkelstein 437 (1999) 265
Mostéfa-Sba, H., B. Domenichini and S. Bourgeois, Iron deposition on TiO_2(110): effect of the surface stoichiometry and roughness 437 (1999) 107
Müller, B., see Erlacher 437 (1999) 191
Mullins, C.B., see Ferguson 437 (1999) L748
Mundschau, M., see Święch 437 (1999) 61
Munro, I.H., see Miyamae 437 (1999) L755
Murri, R., see Pinto 437 (1999) 145

Oh, W.S., see Guo 437 (1999) 49
O'Shea, S.J., see Lantz 437 (1999) 99
Oyoshi, K., see Suzuki 437 (1999) 289

Pang, C.L., S.A. Haycock, H. Raza, G. Thornton, O. Gülseren, R. James and D.W. Bullett, Comment on "High resolution scanning tunnelling microscopy of the rutile TiO_2(110) surface" by R.E. Tanner, M.R. Castell, G.A.D. Briggs [Surf. Sci. 412/413 (1998) 672] 437 (1999) 261
Paolucci, G., see Goldoni 437 (1999) 353

Pedio, M., K. Hevesi, N. Zema, M. Capozi, P. Perfetti, R. Gouttebaron, J.-J. Pireaux, R. Caudano and P. Rudolf, C_{60}/metal surfaces: adsorption and decomposition 437 (1999) 249
Perfetti, P., see Pedio 437 (1999) 249
Petersen, J.H., C. Søndergård, S.V. Hoffman, A. Mikkelsen and D.L. Adams, Surface alloy formation by adsorption of Li on Al(100): studied by high-resolution core-level spectroscopy and low energy electron diffraction 437 (1999) 317
Pinto, N., F. Tombolini, R. Murri, M. De Crescenzi, M. Casalboni, G. Barucca and G. Majni, Photoluminescence investigation of short period silicon–germanium heterostructures grown using molecular beam epitaxy 437 (1999) 145
Pireaux, J.-J., see Pedio 437 (1999) 249
Pollak, E., see Talkner 437 (1999) 198
Poulopoulos, P., J. Lindner, M. Farle and K. Baberschke, Changes of magnetic anisotropy due to roughness: a quantitative scanning tunneling microscopy study on Ni/Cu(001) 437 (1999) 277

Rappich, J., see Dittrich 437 (1999) 154
Raza, H., see Pang 437 (1999) 261
Reeves, C.T., see Ferguson 437 (1999) L748
Resel, R., see Erlacher 437 (1999) 191
Reutt-Robey, J.E., see Go 437 (1999) 377
Roberts, J.G., S. Hoffer, M.A. Van Hove and G.A. Somorjai, Tensor low-energy electron diffraction analysis of the surface structure of NaCl(100) thin films grown on Pd(100) and Pt(111) 437 (1999) 75
Rudolf, P., see Pedio 437 (1999) 249

Sandström, P., E.B. Svedberg, J. Birch and J.E. Sundgren, Time-resolved measurements of the formation of single-domain epitaxial Ni films on MgO(111) substrates using in-situ RHEED analysis 437 (1999) L767
Santra, A.K., see Cowell 437 (1999) 1
Schmitz-Hübsch, T., T. Fritz, R. Staub, A. Back, N.R. Armstrong and K. Leo, Structure of 3, 4, 9, 10-perylene-tetracarboxylic-dianhydride grown on reconstructed and unreconstructed Au(100) 437 (1999) 163
Schultz, P.A., see Li 437 (1999) 173
Schwartzkopff, M., see Dittrich 437 (1999) 154
Sears, M.P., see Li 437 (1999) 173
Selke, W., see Bisani 437 (1999) 137
Semlali, A., see Boustimi 437 (1999) 91
Shahal, O., see Finkelstein 437 (1999) 265
Sheppard, N., see Ainsworth 437 (1999) 9
Shudo, K., see Iimori 437 (1999) 86
Silkin, V.M., see Chulkov 437 (1999) 330
Somorjai, G.A., see Roberts 437 (1999) 75
Søndergård, C., see Petersen 437 (1999) 317
Souda, R., see Suzuki 437 (1999) 289
Srivastava, D., see Halicioglu 437 (1999) L773
Staub, R., see Schmitz-Hübsch 437 (1999) 163
Steinrück, H.-P., see Koschel 437 (1999) 125
Stone, A.J., see Engkvist 437 (1999) 239
Sundgren, J.E., see Sandström 437 (1999) L767
Suzuki, T., S. Hishita, K. Oyoshi and R. Souda, Structure of α-Al_2O_3(0001) surface and Ti deposited on α-Al_2O_3(0001) substrate; CAICISS and RHEED study 437 (1999) 289
Svedberg, E.B., see Sandström 437 (1999) L767
Święch, W., M. Mundschau and C.P. Flynn, Characterization of single crystal films of molybdenum (011) grown by molecular beam epitaxy on sapphire ($11\bar{2}0$) and studied by low-energy electron microscopy 437 (1999) 61

Talkner, P., E. Hershkovitz, E. Pollak and P. Hänggi, Controlling activated surface diffusion by external fields 437 (1999) 198
Tanner, R.E., M.R. Castell and G.A.D. Briggs, Reply to "Comment on "High resolution scanning tunnelling microscopy of the rutile TiO_2(110) surface" by R.E. Tanner, M.R. Castell, G.A.D. Briggs" [Surf. Sci. 412/413 (1998) 672] 437 (1999) 263
Thierry, A., see Erlacher 437 (1999) 191
Thornton, G., see Pang 437 (1999) 261
Thuermer, K., see Go 437 (1999) 377
Tombolini, F., see Pinto 437 (1999) 145
Trischberger, P., see Koschel 437 (1999) 125

Uchida, H., see Miyamae 437 (1999) L755
Urisu, T., see Miyamae 437 (1999) L755

Van Hove, M.A., see Roberts 437 (1999) 75

Wan, J., see Jia 437 (1999) 299
Weaver, M.J., Binding sites and vibrational frequencies for dilute carbon monoxide and nitric oxide adlayers in electrochemical versus ultrahigh-vacuum environments: the roles of double-layer solvation 437 (1999) 215
Welland, M.E., see Lantz 437 (1999) 99
Widdra, W., see Koschel 437 (1999) 125
Wojciechowski, K.F., Surface energy of metals: theory and experiment 437 (1999) 285

Yagi, K., see Minoda 437 (1999) L761
Ye, L., see Jia 437 (1999) 299
York, S.C., M.W. Abee and D.F. Cox, α-Cr_2O_3($10\bar{1}2$): surface characterization and oxygen adsorption 437 (1999) 386

Zema, N., see Pedio 437 (1999) 249
Zhdanov, V.P. and B. Kasemo, Nontraditional models of Ostwald ripening on solid surfaces: from physics to biology 437 (1999) 307

ELSEVIER

Surface Science 437 (1999) 400–406

surface science

www.elsevier.nl/locate/susc

Subject index

THEORETICAL METHODS, MODELS AND TECHNIQUES

Ab initio quantum chemical methods and calculations

O. Engkvist and A.J. Stone, Adsorption of water on the MgO(001) surface 437 (1999) 239

Atom–solid interactions, scattering, diffraction

M. Boustimi, J. Baudon, A. Semlali, R. Mathevet and B. Labani, The problem of an atom inside a cavity in an infinite isotropic medium 437 (1999) 91

P. Sandström, E.B. Svedberg, J. Birch and J.E. Sundgren, Time-resolved measurements of the formation of single-domain epitaxial Ni films on MgO(111) substrates using in-situ RHEED analysis 437 (1999) L767

Atomistic dynamics

M. Bisani and W. Selke, Step fluctuations and random walks 437 (1999) 137

P. Talkner, E. Hershkovitz, E. Pollak and P. Hänggi, Controlling activated surface diffusion by external fields 437 (1999) 198

Computer simulations

P. Talkner, E. Hershkovitz, E. Pollak and P. Hänggi, Controlling activated surface diffusion by external fields 437 (1999) 198

T. Halicioglu and D. Srivastava, Energetics for bonding and detachment steps in etching of Si by Cl 437 (1999) L773

V.P. Zhdanov and B. Kasemo, Nontraditional models of Ostwald ripening on solid surfaces: from physics to biology 437 (1999) 307

Construction and use of effective interatomic interactions

O. Engkvist and A.J. Stone, Adsorption of water on the MgO(001) surface 437 (1999) 239

Density functional calculations

A. Bogicevic and D.R. Jennison, Role of surface vacancies and water products in metal nucleation: Pt/MgO(100) 437 (1999) L741

D. Alfè, S. de Gironcoli and S. Baroni, The reconstruction of nickel and rhodium (001) surfaces upon carbon, nitrogen or oxygen adsorptions 437 (1999) 18

M. Li, W. Hebenstreit, L. Gross, U. Diebold, M.A. Henderson, D.R. Jennison, P.A. Schultz and M.P. Sears, Oxygen-induced restructuring of the TiO_2(110) surface: a comprehensive study 437 (1999) 173

E.V. Chulkov, V.M. Silkin and P.M. Echenique, Image potential states on metal surfaces: binding energies and wave functions 437 (1999) 330

A. Michaelides and P. Hu, Methyl chemisorption on Ni(111) and C–H–M multicentre bonding: a density functional theory study 437 (1999) 362

Equilibrium thermodynamics and statistical mechanics

P. Talkner, E. Hershkovitz, E. Pollak and P. Hänggi, Controlling activated surface diffusion by external fields 437 (1999) 198

Models of non-linear phenomena

V.P. Zhdanov and B. Kasemo, Nontraditional models of Ostwald ripening on solid surfaces: from physics to biology 437 (1999) 307

Molecular dynamics

Y. Finkelstein, R. Moreh and O. Shahal, Out-of-plane orientation of multilayer N_2 films adsorbed on Grafoil at 20 K 437 (1999) 265

Monte Carlo simulations

M. Bisani and W. Selke, Step fluctuations and random walks 437 (1999) 137

Semi-empirical models and model calculations

O. Engkvist and A.J. Stone, Adsorption of water on the MgO(001) surface 437 (1999) 239

E.V. Chulkov, V.M. Silkin and P.M. Echenique, Image potential states on metal surfaces: binding energies and wave functions 437 (1999) 330

EXPERIMENTAL SAMPLE PREPARATION AND CHARACTERIZATION METHODS

Atom–solid reactions

E.P. Go, K. Thuermer and J.E. Reutt-Robey, H adsorption and the formation of alane oligomers on Al(111) 437 (1999) 377

Atomic force microscopy

M.A. Lantz, S.J. O'Shea and M.E. Welland, Measurement of forces during the modification of C60 islands 437 (1999) 99
C. Freure, G. Chen and J.H. Horton, Examination of solvent interactions at the surface of poly(ethylene)terepthalate films using atomic force microscopy and infrared spectroscopy 437 (1999) 231

Auger electron spectroscopy

Q. Guo, S. Lee and D.W. Goodman, Vanadium oxides thin films grown on rutile $TiO_2(110)$-(1×1) and (1×2) surfaces 437 (1999) 38
Q. Guo, W.S. Oh and D.W. Goodman, Titanium oxide films grown on Mo(110) 437 (1999) 49
H. Mostéfa-Sba, B. Domenichini and S. Bourgeois, Iron deposition on $TiO_2(110)$: effect of the surface stoichiometry and roughness 437 (1999) 107
S.C. York, M.W. Abee and D.F. Cox, α-$Cr_2O_3(10\bar{1}2)$: surface characterization and oxygen adsorption 437 (1999) 386

Electron energy loss spectroscopy

Q. Guo, S. Lee and D.W. Goodman, Vanadium oxides thin films grown on rutile $TiO_2(110)$-(1×1) and (1×2) surfaces 437 (1999) 38
Q. Guo, W.S. Oh and D.W. Goodman, Titanium oxide films grown on Mo(110) 437 (1999) 49
A. Dinger, C. Lutterloh, J. Biener and J. Küppers, Reactions of hydrogen atoms with acetone monolayers adsorbed on graphite monolayer covered Pt(111) surfaces 437 (1999) 116

Electron microscopy

Low-energy electron microscopy (LEEM)

W. Święch, M. Mundschau and C.P. Flynn, Characterization of single crystal films of molybdenum (011) grown by molecular beam epitaxy on sapphire $(11\bar{2}0)$ and studied by low-energy electron microscopy 437 (1999) 61

Reflection electron microscopy (REM)

H. Minoda and K. Yagi, Surface morphology of Au-adsorbed Si(001) vicinal surfaces studied by reflection electron microscopy 437 (1999) L761

Electron–solid diffraction

J.G. Roberts, S. Hoffer, M.A. Van Hove and G.A. Somorjai, Tensor low-energy electron diffraction analysis of the surface structure of NaCl(100) thin films grown on Pd(100) and Pt(111) 437 (1999) 75

Low energy electron diffraction (LEED)

Q. Guo, S. Lee and D.W. Goodman, Vanadium oxides thin films grown on rutile $TiO_2(110)$-(1×1) and (1×2) surfaces 437 (1999) 38
Q. Guo, W.S. Oh and D.W. Goodman, Titanium oxide films grown on Mo(110) 437 (1999) 49
W. Święch, M. Mundschau and C.P. Flynn, Characterization of single crystal films of molybdenum (011) grown by molecular beam epitaxy on sapphire $(11\bar{2}0)$ and studied by low-energy electron microscopy 437 (1999) 61
J.G. Roberts, S. Hoffer, M.A. Van Hove and G.A. Somorjai, Tensor low-energy electron diffraction analysis of the surface structure of NaCl(100) thin films grown on Pd(100) and Pt(111) 437 (1999) 75
M. Pedio, K. Hevesi, N. Zema, M. Capozi, P. Perfetti, R. Gouttebaron, J.-J. Pireaux, R. Caudano and P. Rudolf, C_{60}/metal surfaces: adsorption and decomposition 437 (1999) 249
J.H. Petersen, C. Søndergård, S.V. Hoffman, A. Mikkelsen and D.L. Adams, Surface alloy formation by adsorption of Li on Al(100): studied by high-resolution core-level spectroscopy and low energy electron diffraction 437 (1999) 317
S.C. York, M.W. Abee and D.F. Cox, α-$Cr_2O_3(10\bar{1}2)$: surface characterization and oxygen adsorption 437 (1999) 386

Reflection high-energy electron diffraction (RHEED)

P. Sandström, E.B. Svedberg, J. Birch and J.E. Sundgren, Time-resolved measurements of the formation of single-domain epitaxial Ni films on MgO(111) substrates using in-situ RHEED analysis 437 (1999) L767
T. Suzuki, S. Hishita, K. Oyoshi and R. Souda, Structure of α-$Al_2O_3(0001)$ surface and Ti deposited on α-$Al_2O_3(0001)$ substrate; CAICISS and RHEED study 437 (1999) 289

Transmission high-energy electron diffraction

K. Erlacher, R. Resel, S. Hampel, T. Kuhlmann, K. Lischka, B. Müller, A. Thierry, B. Lotz and G. Leising, Epitaxial growth of *para*-hexaphenyl on GaAs(001)-2×4 437 (1999) 191

Field ion microscopy

K. Kyuno and G. Ehrlich, Diffusion and dissociation of platinum clusters on Pt(111) 437 (1999) 29

Inverse photoemission spectroscopy

M. Pedio, K. Hevesi, N. Zema, M. Capozi, P. Perfetti, R. Gouttebaron, J.-J. Pireaux, R. Caudano and P. Rudolf, C_{60}/metal surfaces: adsorption and decomposition 437 (1999) 249

Ion scattering spectroscopy

Low energy ion scattering (LEIS)

M. Li, W. Hebenstreit, L. Gross, U. Diebold, M.A. Henderson, D.R. Jennison, P.A. Schultz and M.P Sears, Oxygen-induced restructuring of the $TiO_2(110)$ surface: a comprehensive study 437 (1999) 173
T. Suzuki, S. Hishita, K. Oyoshi and R. Souda, Structure of α-$Al_2O_3(0001)$ surface and Ti deposited on α-$Al_2O_3(0001)$ substrate; CAICISS and RHEED study 437 (1999) 289

Molecular beam epitaxy

N. Pinto, F. Tombolini, R. Murri, M. De Crescenzi, M. Casalboni, G. Barucca and G. Majni, Photoluminescence investigation of short period silicon–germanium heterostructures grown using molecular beam epitaxy 437 (1999) 145

Photoelectron spectroscopy

Q. Guo, S. Lee and D.W. Goodman, Vanadium oxides thin films grown on rutile $TiO_2(110)$-(1×1) and (1×2) surfaces 437 (1999) 38

H. Koschel, G. Held, P. Trischberger, W. Widdra and H.-P. Steinrück, Benzene adsorption on a pseudomorphic Cu monolayer on Ni(111) – a combined TPD and ARUPS study 437 (1999) 125

J.H. Petersen, C. Søndergård, S.V. Hoffman, A. Mikkelsen and D.L. Adams, Surface alloy formation by adsorption of Li on Al(100): studied by high-resolution core-level spectroscopy and low energy electron diffraction 437 (1999) 317

Angle resolved photoemission

H. Koschel, G. Held, P. Trischberger, W. Widdra and H.-P. Steinrück, Benzene adsorption on a pseudomorphic Cu monolayer on Ni(111) – a combined TPD and ARUPS study 437 (1999) 125

Soft X-ray photoelectron spectroscopy (using synchrotron radiation)

J.H. Petersen, C. Søndergård, S.V. Hoffman, A. Mikkelsen and D.L. Adams, Surface alloy formation by adsorption of Li on Al(100): studied by high-resolution core-level spectroscopy and low energy electron diffraction 437 (1999) 317

Visible and ultraviolet photoelectron spectroscopy

M. Pedio, K. Hevesi, N. Zema, M. Capozi, P. Perfetti, R. Gouttebaron, J.-J. Pireaux, R. Caudano and P. Rudolf, C_{60}/metal surfaces: adsorption and decomposition 437 (1999) 249

X-ray photoelectron spectroscopy

J.J. Cowell, A.K. Santra, R. Lindsay, R.M. Lambert, A. Baraldi and A. Goldoni, Bonding and reactivity of styrene on Cu(110): heterogeneous alkene epoxidation without the use of silver 437 (1999) 1

Q. Guo, S. Lee and D.W. Goodman, Vanadium oxides thin films grown on rutile $TiO_2(110)$-(1×1) and (1×2) surfaces 437 (1999) 38

Q. Guo, W.S. Oh and D.W. Goodman, Titanium oxide films grown on Mo(110) 437 (1999) 49

H. Mostéfa-Sba, B. Domenichini and S. Bourgeois, Iron deposition on $TiO_2(110)$: effect of the surface stoichiometry and roughness 437 (1999) 107

M. Pedio, K. Hevesi, N. Zema, M. Capozi, P. Perfetti, R. Gouttebaron, J.-J. Pireaux, R. Caudano and P. Rudolf, C_{60}/metal surfaces: adsorption and decomposition 437 (1999) 249

S.C. York, M.W. Abee and D.F. Cox, α-$Cr_2O_3(10\bar{1}2)$: surface characterization and oxygen adsorption 437 (1999) 386

Synchrotron radiation photoelectron spectroscopy

T. Iimori, K. Hattori, K. Shudo and F. Komori, Chlorine extraction by atomic hydrogen on Si(111)-7×7 surfaces 437 (1999) 86

Photon absorption spectroscopy

Infrared absorption spectroscopy

M.K. Ainsworth, M.R.S. McCoustra, M.A. Chesters, N. Sheppard and C. De La Cruz, An infrared study of ethene and CO coadsorption on Pt[111] and a Pt/SiO_2 catalyst: ambiguities in the interpretation of difference spectra 437 (1999) 9

M.J. Weaver, Binding sites and vibrational frequencies for dilute carbon monoxide and nitric oxide adlayers in electrochemical versus ultrahigh-vacuum environments: the roles of double-layer solvation 437 (1999) 215

Near edge extended X-ray absorption fine structure (NEXAFS)

J.J. Cowell, A.K. Santra, R. Lindsay, R.M. Lambert, A. Baraldi and A. Goldoni, Bonding and reactivity of styrene on Cu(110): heterogeneous alkene epoxidation without the use of silver 437 (1999) 1

Photon stimulated desorption (non-electronic)

T. Miyamae, H. Uchida, I.H. Munro and T. Urisu, Direct observation of synchrotron-radiation-stimulated desorption of thin SiO_2 films on Si(111) by scanning tunneling microscopy 437 (1999) L755

Reflection spectroscopy

M.K. Ainsworth, M.R.S. McCoustra, M.A. Chesters, N. Sheppard and C. De La Cruz, An infrared study of ethene and CO coadsorption on Pt[111] and a Pt/SiO_2 catalyst: ambiguities in the interaction of difference spectra 437 (1999) 9

Scanning tunneling microscopy

T. Miyamae, H. Uchida, I.H. Munro and T. Urisu, Direct observation of synchrotron-radiation-stimulated desorption of thin SiO_2 films on Si(111) by scanning tunneling microscopy 437 (1999) L755

M.A. Lantz, S.J. O'Shea and M.E. Welland, Measurement of forces during the modification of C60 islands 437 (1999) 99

Th. Dittrich, M. Schwartzkopff, E. Hartmann and J. Rappich, On the origin of the positive charge on hydrogenated Si surfaces and its dependence on the surface morphology 437 (1999) 154

T. Schmitz-Hübsch, T. Fritz, R. Staub, A. Back, N.R. Armstrong and K. Leo, Structure of 3, 4, 9, 10-perylene-tetracarboxylic-dianhydride grown on reconstructed and unreconstructed Au(100) 437 (1999) 163

M. Li, W. Hebenstreit, L. Gross, U. Diebold, M.A. Henderson, D.R. Jennison, P.A. Schultz and M.P Sears, Oxygen-induced restructuring of the $TiO_2(110)$ surface: a comprehensive study 437 (1999) 173

C.L. Pang, S.A. Haycock, H. Raza, G. Thornton, O. Gülseren, R. James and D.W. Bullett, Comment on "High resolution scanning tunnelling microscopy of the rutile $TiO_2(110)$ surface" by R.E. Tanner, M.R. Castell, G.A.D. Briggs [Surf. Sci. 412/413 (1998) 672] 437 (1999) 261

R.E. Tanner, M.R. Castell and G.A.D. Briggs, Reply to "Comment on "High resolution scanning tunnelling microscopy of the rutile $TiO_2(110)$ surface" by R.E. Tanner, M.R. Castell, G.A.D. Briggs" [Surf. Sci. 412/413 (1998) 672] 437 (1999) 263

E.P. Go, K. Thuermer and J.E. Reutt-Robey, H adsorption and the formation of alane oligomers on Al(111) 437 (1999) 377

Secondary ion mass spectroscopy

M. Li, W. Hebenstreit, L. Gross, U. Diebold, M.A. Henderson, D.R. Jennison, P.A. Schultz and M.P Sears, Oxygen-induced restructuring of the $TiO_2(110)$ surface: a comprehensive study 437 (1999) 173

G.S. Herman, Characterization of surface defects on epitaxial $CeO_2(001)$ films 437 (1999) 207

Sputter deposition

P. Sandström, E.B. Svedberg, J. Birch and J.E. Sundgren, Time-resolved measurements of the formation of single-domain epitaxial Ni films on MgO(111) substrates using in-situ RHEED analysis 437 (1999) L767

Thermal desorption spectroscopy

J.G. Roberts, S. Hoffer, M.A. Van Hove and G.A. Somorjai, Tensor low-energy electron diffraction analysis of the surface structure of NaCl(100) thin films grown on Pd(100) and Pt(111) 437 (1999) 75

H. Koschel, G. Held, P. Trischberger, W. Widdra and H.-P. Steinrück, Benzene adsorption on a pseudomorphic Cu monolayer on Ni(111) – a combined TPD and ARUPS study 437 (1999) 125

PHENOMENA

Adhesion

A. Bogicevic and D.R. Jennison, Role of surface vacancies and water products in metal nucleation: Pt/MgO(100) 437 (1999) L741

Adsorption kinetics

B.A. Ferguson, C.T. Reeves and C.B. Mullins, Trapping dynamics of disilane on bare and monohydride-terminated Si(100)-2 × 1 437 (1999) L748

Catalysis

J.J. Cowell, A.K. Santra, R. Lindsay, R.M. Lambert, A. Baraldi and A. Goldoni, Bonding and reactivity of styrene on Cu(110): heterogeneous alkene epoxidation without the use of silver 437 (1999) 1

C.L. Pang, S.A. Haycock, H. Raza, G. Thornton, O. Gülseren, R. James and D.W. Bullett, Comment on "High resolution scanning tunnelling microscopy of the rutile $TiO_2(110)$ surface" by R.E. Tanner, M.R. Castell, G.A.D. Briggs [Surf. Sci. 412/413 (1998) 672] 437 (1999) 261

R.E. Tanner, M.R. Castell and G.A.D. Briggs, Reply to "Comment on "High resolution scanning tunnelling microscopy of the rutile $TiO_2(110)$ surface" by R.E. Tanner, M.R. Castell, G.A.D. Briggs" [Surf. Sci. 412/413 (1998) 672] 437 (1999) 263

Chemisorption

J.J. Cowell, A.K. Santra, R. Lindsay, R.M. Lambert, A. Baraldi and A. Goldoni, Bonding and reactivity of styrene on Cu(110): heterogeneous alkene epoxidation without the use of silver 437 (1999) 1

M.K. Ainsworth, M.R.S. McCoustra, M.A. Chesters, N. Sheppard and C. De La Cruz, An infrared study of ethene and CO coadsorption on Pt[111] and a Pt/SiO_2 catalyst: ambiguities in the interpretation of difference spectra 437 (1999) 9

A. Dinger, C. Lutterloh, J. Biener and J. Küppers, Reactions of hydrogen atoms with acetone monolayers adsorbed on graphite monolayer covered Pt(111) surfaces 437 (1999) 116

H. Koschel, G. Held, P. Trischberger, W. Widdra and H.-P. Steinrück, Benzene adsorption on a pseudomorphic Cu monolayer on Ni(111) – a combined TPD and ARUPS study 437 (1999) 125

M.J. Weaver, Binding sites and vibrational frequencies for dilute carbon monoxide and nitric oxide adlayers in electrochemical versus ultrahigh-vacuum environments: the roles of double-layer solvation 437 (1999) 215

M. Pedio, K. Hevesi, N. Zema, M. Capozi, P. Perfetti, R. Gouttebaron, J.-J. Pireaux, R. Caudano and P. Rudolf, C_{60}/metal surfaces: adsorption and decomposition 437 (1999) 249

A. Michaelides and P. Hu, Methyl chemisorption on Ni(111) and C–H–M multicentre bonding: a density functional theory study 437 (1999) 362

S.C. York, M.W. Abee and D.F. Cox, α-$Cr_2O_3(10\bar{1}2)$: surface characterization and oxygen adsorption 437 (1999) 386

Conductivity

M.A. Lantz, S.J. O'Shea and M.E. Welland, Measurement of forces during the modification of C60 islands 437 (1999) 99

Diffusion and migration

K. Kyuno and G. Ehrlich, Diffusion and dissociation of platinum clusters on Pt(111) 437 (1999) 29

P. Talkner, E. Hershkovitz, E. Pollak and P. Hänggi, Controlling activated surface diffusion by external fields 437 (1999) 198

Electrical transport (conductivity, resistivity, mobility, etc.)

M.A. Lantz, S.J. O'Shea and M.E. Welland, Measurement of forces during the modification of C60 islands 437 (1999) 99

Energy dissipation

P. Talkner, E. Hershkovitz, E. Pollak and P. Hänggi, Controlling activated surface diffusion by externaí fields 437 (1999) 198

Epitaxy

Q. Guo, S. Lee and D.W. Goodman, Vanadium oxides thin films grown on rutile $TiO_2(110)$-(1×1) and (1×2) surfaces 437 (1999) 38

Q. Guo, W.S. Oh and D.W. Goodman, Titanium oxide films grown on Mo(110) 437 (1999) 49

T. Schmitz-Hübsch, T. Fritz, R. Staub, A. Back, N.R. Armstrong and K. Leo, Structure of 3, 4, 9, 10-perylene-tetracarboxylic-dianhydride grown on reconstructed and unreconstructed Au(100) 437 (1999) 163

P. Sandström, E.B. Svedberg, J. Birch and J.E. Sundgren, Time-resolved measurements of the formation of single-domain epitaxial Ni films on MgO(111) substrates using in-situ RHEED analysis 437 (1999) L767

T. Suzuki, S. Hishita, K. Oyoshi and R. Souda, Structure of α-$Al_2O_3(0001)$ surface and Ti deposited on α-$Al_2O_3(0001)$ substrate; CAICISS and RHEED study 437 (1999) 289

Etching

T. Halicioglu and D. Srivastava, Energetics for bonding and detachment steps in etching of Si by Cl 437 (1999) L773

E.P. Go, K. Thuermer and J.E. Reutt-Robey, H adsorption and the formation of alane oligomers on Al(111) 437 (1999) 377

Evaporation and sublimation

J.G. Roberts, S. Hoffer, M.A. Van Hove and G.A. Somorjai, Tensor low-energy electron diffraction analysis of the surface structure of NaCl(100) thin films grown on Pd(100) and Pt(111) 437 (1999) 75

Faceting

H. Minoda and K. Yagi, Surface morphology of Au-adsorbed Si(001) vicinal surfaces studied by reflection electron microscopy 437 (1999) L761

Friction

P. Talkner, E. Hershkovitz, E. Pollak and P. Hänggi, Controlling activated surface diffusion by external fields 437 (1999) 198

Growth

J.G. Roberts, S. Hoffer, M.A. Van Hove and G.A. Somorjai, Tensor low-energy electron diffraction analysis of the surface structure of NaCl(100) thin films grown on Pd(100) and Pt(111) 437 (1999) 75

H. Mostéfa-Sba, B. Domenichini and S. Bourgeois, Iron deposition on $TiO_2(110)$: effect of the surface stoichiometry and roughness 437 (1999) 107

P. Sandström, E.B. Svedberg, J. Birch and J.E. Sundgren, Time-resolved measurements of the formation of single-domain epitaxial Ni films on MgO(111) substrates using in-situ RHEED analysis 437 (1999) L767

V.P. Zhdanov and B. Kasemo, Nontraditional models of Ostwald ripening on solid surfaces: from physics to biology 437 (1999) 307

Luminescence

Photoluminescence

N. Pinto, F. Tombolini, R. Murri, M. De Crescenzi, M. Casalboni, G. Barucca and G. Majni, Photoluminescence investigation of short period silicon–germanium heterostructures grown using molecular beam epitaxy 437 (1999) 145

Magnetic phenomena (cyclotron resonance, phase transitions, etc.)

P. Poulopoulos, J. Lindner, M. Farle and K. Baberschke, Changes of magnetic anisotropy due to roughness: a quantitative scanning tunneling microscopy study on Ni/Cu(001) 437 (1999) 277

Nucleation

A. Bogicevic and D.R. Jennison, Role of surface vacancies and water products in metal nucleation: Pt/MgO(100) 437 (1999) L741

K. Kyuno and G. Ehrlich, Diffusion and dissociation of platinum clusters on Pt(111) 437 (1999) 29

P. Sandström, E.B. Svedberg, J. Birch and J.E. Sundgren, Time-resolved measurements of the formation of single-domain epitaxial Ni films on MgO(111) substrates using in-situ RHEED analysis 437 (1999) L767

Oxidation

M. Li, W. Hebenstreit, L. Gross, U. Diebold, M.A. Henderson, D.R. Jennison, P.A. Schultz and M.P Sears, Oxygen-induced restructuring of the $TiO_2(110)$ surface: a comprehensive study 437 (1999) 173

Photoelectron diffraction

N. Pinto, F. Tombolini, R. Murri, M. De Crescenzi, M. Casalboni, G. Barucca and G. Majni, Photoluminescence investigation of short period silicon–germanium heterostructures grown using molecular beam epitaxy 437 (1999) 145

Photoelectron emission

A. Goldoni and G. Paolucci, The interaction of C_{60} with Ag(100): strong predominantly ionic bonding 437 (1999) 353

Physical adsorption

O. Engkvist and A.J. Stone, Adsorption of water on the MgO(001) surface 437 (1999) 239

Y. Finkelstein, R. Moreh and O. Shahal, Out-of-plane orientation of multilayer N_2 films adsorbed on Grafoil at 20 K 437 (1999) 265

Sputtering

Step formation and bunching

W. Święch, M. Mundschau and C.P. Flynn, Characterization of single crystal films of molybdenum (011) grown by molecular beam epitaxy on sapphire ($11\bar{2}0$) and studied by low-energy electron microscopy 437 (1999) 61

Surface chemical reaction

J.J. Cowell, A.K. Santra, R. Lindsay, R.M. Lambert, A. Baraldi and A. Goldoni, Bonding and reactivity of styrene on Cu(110): heterogeneous alkene epoxidation without the use of silver 437 (1999) 1

T. Iimori, K. Hattori, K. Shudo and F. Komori, Chlorine extraction by atomic hydrogen on Si(111)-7 × 7 surfaces 437 (1999) 86

A. Dinger, C. Lutterloh, J. Biener and J. Küppers, Reactions of hydrogen atoms with acetone monolayers adsorbed on graphite monolayer covered Pt(111) surfaces 437 (1999) 116

T. Halicioglu and D. Srivastava, Energetics for bonding and detachment steps in etching of Si by Cl 437 (1999) L773

E.P. Go, K. Thuermer and J.E. Reutt-Robey, H adsorption and the formation of alane oligomers on Al(111) 437 (1999) 377

Surface diffusion

K. Kyuno and G. Ehrlich, Diffusion and dissociation of platinum clusters on Pt(111) 437 (1999) 29

P. Talkner, E. Hershkovitz, E. Pollak and P. Hänggi, Controlling activated surface diffusion by external fields 437 (1999) 198

Surface electronic phenomena (work function, surface potential, surface states, etc.)

Th. Dittrich, M. Schwartzkopff, E. Hartmann and J. Rappich, On the origin of the positive charge on hydrogenated Si surfaces and its dependence on the surface morphology 437 (1999) 154

M.J. Weaver, Binding sites and vibrational frequencies for dilute carbon monoxide and nitric oxide adlayers in electrochemical versus ultrahigh-vacuum environments: the roles of double-layer solvation 437 (1999) 215

Y. Jia, X. Hu, B. Ma, J. Wan and L. Ye, Surface electronic properties of Si(337) 437 (1999) 299

E.V. Chulkov, V.M. Silkin and P.M. Echenique, Image potential states on metal surfaces: binding energies and wave functions 437 (1999) 330

Surface energy

K.F. Wojciechowski, Surface energy of metals: theory and experiment 437 (1999) 285

Surface photovoltage

Th. Dittrich, M. Schwartzkopff, E. Hartmann and J. Rappich, On the origin of the positive charge on hydrogenated Si surfaces and its dependence on the surface morphology 437 (1999) 154

Surface relaxation and reconstruction

D. Alfè, S. de Gironcoli and S. Baroni, The reconstruction of nickel and rhodium (001) surfaces upon carbon, nitrogen or oxygen adsorptions 437 (1999) 18

J.G. Roberts, S. Hoffer, M.A. Van Hove and G.A. Somorjai, Tensor low-energy electron diffraction analysis of the surface structure of NaCl(100) thin films grown on Pd(100) and Pt(111) 437 (1999) 75

C.L. Pang, S.A. Haycock, H. Raza, G. Thornton, O. Gülseren, R. James and D.W. Bullett, Comment on "High resolution scanning tunnelling microscopy of the rutile TiO_2(110) surface" by R.E. Tanner, M.R. Castell, G.A.D. Briggs [Surf. Sci. 412/413 (1998) 672] 437 (1999) 261

R.E. Tanner, M.R. Castell and G.A.D. Briggs, Reply to "Comment on "High resolution scanning tunnelling microscopy of the rutile TiO_2(110) surface" by R.E. Tanner, M.R. Castell, G.A.D. Briggs" [Surf. Sci. 412/413 (1998) 672] 437 (1999) 263

J.H. Petersen, C. Søndergård, S.V. Hoffman, A. Mikkelsen and D.L. Adams, Surface alloy formation by adsorption of Li on Al(100): studied by high-resolution core-level spectroscopy and low energy electron diffraction 437 (1999) 317

Surface roughening

Th. Dittrich, M. Schwartzkopff, E. Hartmann and J. Rappich, On the origin of the positive charge on hydrogenated Si surfaces and its dependence on the surface morphology 437 (1999) 154

Surface structure, morphology, roughness, and topography

W. Święch, M. Mundschau and C.P. Flynn, Characterization of single crystal films of molybdenum (011) grown by molecular beam epitaxy on sapphire ($11\bar{2}0$) and studied by low-energy electron microscopy 437 (1999) 61

K. Erlacher, R. Resel, S. Hampel, T. Kuhlmann, K. Lischka, B. Müller, A. Thierry, B. Lotz and G. Leising, Epitaxial growth of *para*-hexaphenyl on GaAs(001)-2 × 4 437 (1999) 191

C.L. Pang, S.A. Haycock, H. Raza, G. Thornton, O. Gülseren, R. James and D.W. Bullett, Comment on "High resolution scanning tunnelling microscopy of the rutile TiO_2(110) surface" by R.E. Tanner, M.R. Castell, G.A.D. Briggs [Surf. Sci. 412/413 (1998) 672] 437 (1999) 261

R.E. Tanner, M.R. Castell and G.A.D. Briggs, Reply to "Comment on "High resolution scanning tunnelling microscopy of the rutile TiO_2(110) surface" by R.E. Tanner, M.R. Castell, G.A.D. Briggs" [Surf. Sci. 412/413 (1998) 672] 437 (1999) 263

P. Poulopoulos, J. Lindner, M. Farle and K. Baberschke, Changes of magnetic anisotropy due to roughness: a quantitative scanning tunneling microscopy study on Ni/Cu(001) 437 (1999) 277

T. Suzuki, S. Hishita, K. Oyoshi and R. Souda, Structure of α-Al_2O_3(0001) surface and Ti deposited on α-Al_2O_3(0001) substrate; CAICISS and RHEED study 437 (1999) 289

Thermal desorption

J.J. Cowell, A.K. Santra, R. Lindsay, R.M. Lambert, A. Baraldi and A. Goldoni, Bonding and reactivity of styrene on Cu(110): heterogeneous alkene epoxidation without the use of silver 437 (1999) 1

A. Dinger, C. Lutterloh, J. Biener and J. Küppers, Reactions of hydrogen atoms with acetone monolayers adsorbed on graphite monolayer covered Pt(111) surfaces 437 (1999) 116

H. Koschel, G. Held, P. Trischberger, W. Widdra and H.-P. Steinrück, Benzene adsorption on a pseudomorphic Cu monolayer on Ni(111) – a combined TPD and ARUPS study 437 (1999) 125

Vibrations of adsorbed molecules

M.K. Ainsworth, M.R.S. McCoustra, M.A. Chesters, N. Sheppard and C. De La Cruz, An infrared study of ethene and CO coadsorption on Pt[111] and a Pt/SiO_2 catalyst: ambiguities in the interpretation of difference spectra 437 (1999) 9

M.J. Weaver, Binding sites and vibrational frequencies for dilute carbon monoxide and nitric oxide adlayers in electrochemical versus ultrahigh-vacuum environments: the roles of double-layer solvation 437 (1999) 215

E.P. Go, K. Thuermer and J.E. Reutt-Robey, H adsorption and the formation of alane oligomers on Al(111) 437 (1999) 377